Obituary

GEORGE CARMICHAEL LOW, M.A., M.D., C.M. F.R.C.P.

The death of George Carmichael Low on July 31 at the age of 79 marks the end of the formative era of tropical medicine in Britain. As the disciple of Sir Patrick Manson he was in at the beginning, and he was present at the solution of many of the fundamental discoveries of what then constituted a new science; it was upon him that the mantle of Manson fell to continue the traditions of the London School of Tropical Medicine. His passing therefore removes a figure and a character that was well known and everywhere recognized as original.

George Carmichael Low was born in 1872 at Monifieth. Forfarshire. He thus inherited some Scottish traditions and was brought up in a strictly disciplined school, so that this training became apparent in his mannerisms throughout his long life. After schooling at St. Andrews he studied medicine in Edinburgh, qualifying with first-class honours in 1897 and proceeding M.D. with gold medal in 1910. He also obtained the gold medal in tropical medicine in 1912. Among the great teachers of his day he placed Greenfield very high. The fame of Manson was then in the ascendant, and Low came to London to sit at his feet. Soon he travelled to Heidelberg and Vienna to learn fresh techniques. especially the celloidin method of cutting sections of insects which Manson wished to apply to a collection of filaria-infected mosquitoes sent to him by Thomas Bancroft, of Brisbane, the son of the great Joseph, after whom Filaria bancrofti had been named by Cobbold. Returning to London in 1899, he was not long in showing almost at the first attempt, and for the first time, that the larval filaria emerged from the tip of the proboscis and that man became reinfected by the mosquito in the act of biting. This solution ran contrary to Manson's hypothesis, which envisaged the worm re-entering the human body via drinking-water in which the mosquito vector had died. This discovery, published in the British Medical Journal, 1900, 1, 1456, naturally attracted much attention, and it was not long before further outlets for his energy were forthcoming.

In the autumn of 1900 Low was engaged in fundamental malaria research. Consequent upon Ross's original discoveries regarding the mosquito transmission of malaria and Grassi's confirmation (1899) in man, Manson found that in official circles scepticism about this important question still existed. A scheme was therefore devised to demonstrate that Europeans could live and remain free of fever in the most malarious districts, provided they slept at night in a mosquito-proof house. Low was placed in charge and had as his companions L. W. Sambon and Signor Terzi, the well-known artist. These three lived three months from August, 1900, in a screened hut erected at Ostia in the Roman Campagna. During the daytime they roamed about the countryside amidst the fever-stricken peasants, collecting mosquito larvae and making observations, but being hustled with typical Scots discipline into their hut every night by Low. The experiment was absolutely successful, entirely vindicating Manson's hypothesis, and pointed the way to badly needed anti-mosquito measures on the West Coast of Africa and elsewhere. During this time Low's little malaria squad was visited by the King of Italy, while Professor Grassi came there to collect Anopheles maculipennis larvae, hatched out in Rome and set to feed on malaria cases. They were then dispatched to Manson in London to bite his son, P. T. Manson, who subsequently developed benign tertian malaria (British Medical Journal, 1900, 2, 949). His next expedition was as Craggs scholar to the West Indies in 1901, where he travelled widely, eventually reaching British Guiana. There he studied Filaria demarquayi among the aboriginal Carib Indians of South America.

The year 1903 was spent with the Royal Society's Commission in Uganda, where, together with Castellani and Nabarro, he was investigating the aetiology of "sleeping sickness." He gave most attention to the possible role which Filaria (now Acanthocheilonema) perstans might play in this disease, a hypothesis which Manson himself had put forward.

A new superintendent of the newly created London School of Tropical Medicine was required, and Low was the obvious choice. Thereafter he found himself chained to the metropolis, spending the rest of his career in the service of the school and as physician to the Hospital for Tropical Diseases. He followed the school from the Albert Docks to its present situation in Bloomsbury. Throughout this long period, some 34 years before he retired, he taught assiduously and examined both for the London M.D. and the D.T.M.&H. of the Conjoint Board. His clinical afternoons were always well attended by large and critical classes. They became known as fountains of instruction and as a source of no little amusement. At various times Low served on committees of the Colonial Office and of London University. Possibly one of his greatest achievements, and certainly, as a loyal pupil of Manson, one of which he was most proud, was the institution of the Royal Society of Tropical Medicine and Hygiene. He was an original founder (with Sir J. Cantlie) in 1907, and served as secretary from 1912 to 1920—a most critical period—and as president from 1929 to 1933. History will recall that it was mainly through his efforts that the society was housed in its present quarters in Manson House, Portland Place, in 1930. As the result of his original works he was honoured by being appointed Membre d'Honneur of the Société Belge de Médecine Tropicale and a corresponding member of the French Société de Pathologie Exotique. In 1929 he was awarded the Mary Kingsley Medal of the Liverpool School of Tropical Medicine.

Low's contributions to medical literature were many; and in the textbooks his partnership with Sir Neil Fairley in Price's Textbook of Medicine, and his article with Clifford Dobell on amoebiasis in Byam and Archibald's Practice of Medicine in the Tropics, are best

No account of Low's life would be complete without a reference to his contributions to scientific ornithology. He had a particularly tidy mind which, when bent to the collection of scientific data, shrank from no labours. He was scrupulously accurate and painstaking. A good bird-watcher, he did much to enhance our knowledge of the birds of London, and became in later years as well known on the London reservoirs and on the banks of the Thames as in the Bird Room at South Kensington. He was a valued member of the council of the Zoological Society and of the Royal Society for the Protection of Birds. For many years he was secretary and treasurer of the British Ornithological Club and editor of the Bulletin. He was remarkably successful

in keeping the younger ornithologists together. He made some very valuable contributions to serious ornithological literature in his monograph *The Literature* of the Charadriiformes, a second edition of which appeared in 1931, and in his stupendous account of Aves In the centenary volume of the Zoological Society in 1929.

Most people found in Low a kindly, entertaining soul with an attraction especially for young people, dogs, and children. There were those almost unconscious family Scottish witticisms. The erect and possessive presence, the kindly greeting of "How's yoursel'?" the recurrent nod of the head, the clipped staccato speech, the wise twinkle of one eye, the smile which accompanied authoritative and stentorian aphorisms—these will long be remembered, as also a kind of "spooneresque" unconscious wit which fell from him during the course of his public appearances. Low married in 1906 Edith Nash. There were no children of the marriage, and much sympathy will go out to her, his lifelong companion.

LESLIE CUNNINGHAM, M.A., M.B., B.Ch. F.R.C.P.

In the untimely death on July 30 of Dr. Leslie Cunningham, Liverpool lost a distinguished physician. Educated at Cambridge and St. Bartholomew's Hospital, Leslie Cunningham was a Foundation Scholar at Downing College. He qualified with the conjoint diploma in 1916 and took the M.B., B.Ch. in 1921. In 1923 he obtained the M.R.C.P. and in 1942 was elected F.R.C.P.

After serving in the R.A.M.C. with the rank of captain during the first world war, Cunningham went to the Northern Hospital, Liverpool, and in spite of his considerable war experience as a medical officer he started at the bottom again in the post of house-physician. With his outstanding ability and charm of personality he passed rapidly through the stage of registrar to become honorary assistant physician and later honorary physician. Among his other appointments he was honorary consulting physician to Leasowe Children's Hospital, Ormskirk General Hospital, and Birkenhead General Hospital.

E. N. C. writes: Cunningham's first and chief love was the Northern Hospital. His loyalty was outstanding, and there he made many friends and no enemies. He constantly attracted students, who spoke with delight of his careful teaching, his gentle sense of humour, and his kindness. These qualities were well known to his friends and colleagues, but they were evident no less to the young.

He was one of those physicians who, though familiar with the rapid scientific advances of our art, was at his best as a clinician, drawing on a great knowledge of medicine and with wisdom of a rare kind. To many of us he would seem to embody the virtues which Hippocrates preached, and many students must have gained something of this spirit from their contact with him. His widespread practice from North Wales to the Lake District is a testimonial to the esteem in which his character and knowledge were held by general practitioners, and patients had implicit faith in his skill.

Perhaps the key to the man is to be found in his family, where he found such happiness with his devoted wife and children. His recreation at the end of a long day was to amuse the children, and no one could be more entertaining in his droll and kindly way. Sometimes his self-effacement might suggest to the uninformed a certain lack of interest or acumen, but when he gave judgment on any problem, whether clinical or administrative, it was clear that he had a deep understanding of the matter before he spoke. His opinion was correspondingly sure of attentive hearing in both

his hospital and his practice. His complete selflessness led to that consideration for other people's troubles which is such an important attribute in a good doctor. By his character and example he has lit a flame in Liverpool which will burn for many years and has handed a torch to the young practitioners of medicine which they will carry on to others of succeeding generations.

Sir HUGH CAIRNS, K.B.E., D.M., F.R.C.S.

The death of Sir Hugh Cairns was recorded in the *Journal* of July 26 (p. 233).

J. M. W. writes: I should like to pay a tribute to the work done by Sir Hugh Cairns for the Army. Before the second world war Cairns was consultant in neurosurgery to the Queen Alexandra Hospital, Millbank. On the outbreak of war one of his first enthusiasms was the mobile neurosurgical unit. After much intensive work and trial hedevised a motor vehicle to carry everything necessary for emergency head surgery. The vehicle carried operatingtable, instruments, dressings, and the staff of neurosurgeons, physician, anaesthetist, general duty officer, and sisters. The first unit arrived in France in May, 1940, but, most unfortunately, was captured complete (with the exception of the sisters) in the very early operations. This was a sad blow to Cairns. However, more units were mobilized and more specialist personnel assembled. These did very good work in North Africa, Sicily, Italy, and North-west Europe.

Cairns was most interested in motor-cycle accidents, and worked out an excellent type of crash helmet which was universally adopted in the Service and undoubtedly saved many lives. He was also a pioneer in the use of penicillin in head wounds, and I well remember his visit to North Africa with Sir Howard Florey, and his enthusiasm and work there. He was also able to see the work of the mobile neurosurgical unit at first-hand. Sir Geoffrey Jefferson has well said that Cairns usually got what he wanted. If Hugh Cairns thought that a thing was essential he would not take no for an answer, and by his pertinacity and schemes some way would be found of surmounting every difficulty.

I whole-heartedly agree with all that has been written by abler pens than mine about Hugh Cairns. As a colleague and a man he was a stimulating experience to work with, and his energy and enthusiasm were unbounded. His death leaves a deep sense of personal loss. The Army owes him a very great debt.

CATHERINE CHISHOLM, C.B.E., M.D., F.R.C.P.

Dr. Catherine Chisholm's death was recorded in the *Journal* of August 2 (p. 287).

M. M. B. and E. P. write: Swiftly the sorrowful news that Catherine Chisholm had died went abroad and we mourned the loss of a well-tried friend, a beloved and revered colleague, a distinguished citizen of Manchester, and a pioneer medical woman of this country. Flags were flown at half mast at the University of Manchester and at the Duchess of York Hospital for Babies.

Catherine Chisholm's father was a medical graduate of the University of Edinburgh; her mother a Lancashire lady of mill-owner stock. Blended and at times warring elements of her being came from this union of Scotland and England, The woman we knew and loved was the product, big in stature and in mind, lovable, warm-hearted, level-headed, yet impetuous; a great friend, a colleague to respect and to be reckoned with, and in time of need a tower of strength. To her father she was indebted for that far-seeing and liberal outlook which encouraged her first to take an Arts degree at Manchester University and later to apply successfully for permission to study medicine. In both courses she distinguished herself, gaining the Bishop Lee Greek Testament Prize in her Arts course and several prizes in her final year in medicine. After graduating in medicine in 1904 she spent some time in resident posts, then settled for a number of years in general practice in Manchester. Perhaps "settled" is a wrong description of such a dynamic personality: the years in practice, however, served to show her the real voca-

tion she sought, which was the care of children. To see a desired objective was to Catherine Chisholm synonymous with achieving it. The high mortality rate in Manchester from summer diarrhoea in infants led to the founding in 1914 of a 12-cot hospital-predecessor of the Duchess of York Hospital for Babies—in a converted house in Chorlton to combat the disease. In this new venture Catherine Chisholm was supported by many Manchester men and women, medical and lay, notably by James Niven, the medical officer of health, and Lorrain Smith, the professor of pathology. At the Hospital for Babies Catherine Chisholm acted as mother and mentor, and the hospital, her staff, her colleagues, and her committee responded with loyalty and love. Nothing but the best was good enough for the babies. From her travels and her wide reading she sifted new ideas which could be adopted. Early in the history of B.C.G. inoculation she endeavoured to start an experimental study of its efficacy. To her disappointment the project was turned down. She lived to see B.C.G. adopted as an efficacious prophylactic. For years before the war she was an advocate of breast milk for sick and premature infants, and had instituted residential nursing mothers at the hospital. Early in the war this idea was expanded to a scheme for the collection and sterilization of breast milk from the homes of nursing mothers. From this has stemmed the flourishing milk bank, which supplies not only the Hospital for Babies but is available for sick babies elsewhere. Even the details of child care received her attention. She loved children, and with her insight she realized that none of the scientific advances she advocated in the care of infants were complete unless they were accompanied with affection. In her preoccupation with the Hospital for Babies and the children's departments of Hope Hospital and the Northern Hospital she did not lose sight of the larger issue of the training of students, medical and nursing, in the care of children. She continually pressed for the creation of a chair in child health in the University of Manchester, not only to stress the importance of the subject but to associate all the aspects of the medical care of children in the region round Manchester. The appointment of a professor in child health in the University in 1947 was a great joy to her. Catherine Chisholm had been ill for a year before her death. To an impatient, vital person, this increasing limitation of her activity was a supreme trial. The open countryside she loved was too far away, and books, her greatest solace, were too heavy, but she still had her friends to bring her news of the world. She retained her amazing sense of humour and to the last she was cared for lovingly by her devoted companion. One of Catherine Chisholm's greatest characteristics was her immense generosity. What she gave to her patients, to her colleagues, and to her adopted city are her lasting memorial.

C. L. C. writes: This is no appraisement of the great work that Catherine Chisholm has done for her patients, for the advancement of women, and for her personal friends, but only a note on her origins and early days. Catherine Chisholm entered the Owens College Medical School, Manchester, 54 years ago, after taking her B.A. degree. She was greatly devoted to her Highland father. Dr. Kenneth Mackenzie Chisholm was the son of a Gairloch forester who had the ability and determination to take a medical degree at Edinburgh. He took his pretty young Lancashire wife up to Scotland to practise, but finding that she was miserable away from her own people came down to Lancashire again and settled at Radcliffe for his life's work. From his square brick house, surrounded by a garden which occupied his leisure hours, he drove round to his patients in a pony trap and ruled his family and surroundings with a resolute autocracy. He gave his two daughters a good education, and Mrs. Chisholm saw to it that they were skilled in domestic work and regular in religious observance. There were loud but unavailing protests from them one Sunday afternoon because Mrs. Chisholm recognized some Chopin they were playing as a waltz and promptly forbade it. No dance music was to be played on Sunday. Church attendance, daily prayers, and grace before meat were all indispensable; the

slightest deflection from the beaten path was at once stopped and punished. Yet I do not think anyone who knew Catherine in later years would think that this strict rule had diminished her independence of will or thought, and it certainly did not prevent an affectionate devotion to her parents.

Dr. George Mitchell, who died at his home at Insch, Aberdeenshire, on July 19 at the age of 68, was born at Old Rayne, Aberdeenshire, on March 10, 1884, the son of Dr. Patrick Mitchell, and was educated at Gordon's College, Aberdeen, and at the University of Aberdeen, where he graduated M.B., Ch.B. in 1907. After holding the appointment of house-surgeon at Aberdeen Royal Infirmary he became an extern clinical assistant at the Coombe Lying-in Hospital, Dublin, and while there he took the L.M. in 1908. He settled in practice at Insch in 1909, and remained there until his death. During the war of 1914-18 he was in charge of V.A.D. hospitals in Scotland. For many years a member of the British Medical Association, Dr. Mitchell was chairman of the Aberdeen and Kincardine Counties Division of the Association from 1936 to 1938, and was president of the Aberdeen Branch for the same period. He also represented his constituency at the Annual Representative

Meeting at Newcastle-upon-Tyne in 1921.

We are indebted to Dr. A. U. Webster for the following appreciation: In sorrow we note the death of Dr. George Mitchell, for, with his passing, not only has a great and well-known general practitioner gone from us but his death has also meant the end of an era in medical practice. Dr. Mitchell came of a medical family; his father and his grandfather both practised in that same delectable part of Aberdeenshire, the Gairloch. He became house-surgeon to the late Mr. Scott Riddell, and even then he showed himself by his work to be far above his fellows. Interested in surgery, which was so well taught in his day, he did original work with blood counts in acute abdominal conditions when such work was still in its very early stages, and had he cared he could easily have obtained high rank as a consultant and general surgeon. But the call of general practice and the country was too strong, and after a course of study at the midwifery schools of Dublin he settled in practice among his own people, remaining with them for over 40 years. His reputation as a general practitioner was unrivalled and his success was never challenged. His love for surgery never left him, and, owing in great measure to his drive and foresight, a war memorial cottage hospital was established in Insch after the war of 1914-18. It it, along with the work of a heavy general practice, he did a great amount of general surgery, and he was recognized by his fellow practitioners as an operator of the first rank. Keen on many aspects of country life, he was an excellent horseman and a well-known and sound judge of saddle horses. He is survived by Mrs. Mitchell and two daughters and one son, now an orthopaedic surgeon, who had an outstanding record in the last war.

Dr. STEPHEN YOUNG BAIRD, who died in London on July 18, was educated at the University of Glasgow, graduating M.B., Ch.B. in 1935. He obtained an appointment as medical officer to a tea estate in Bengal, in India, in 1937, and while there he acted as honorary secretary of the Northern Bengal and Dooars Division of the British Medical Association in 1938-9. During the last war he served in the R.A.M.C. from 1940 to November, 1945, when he was released with the rank of captain. In 1946 he became medical officer to a tea estate in Assam.

We are indebted to Dr. W. J. SAVAGE, president of the Assam Branch of the B.M.A., for the following appreciation: It came as a great shock to medical officers in the tea industry in Assam when it became known that Dr. Stephen Young Baird had died in a London nursing-home. He was an energetic worker, and had an extremely sound knowledge of tropical medicine. He did some useful work in the prevention and treatment of kala-azar. He had been attached to the tea industry since 1937, and had distinguished Army service from 1940 to 1945, when he resumed practice in the Takurbari district on the north bank of the Bramaputra. He was well loved by his patients and friends and respected by his colleagues. By nature he was entirely unselfish and straightforward, and had a ready wit. A keen and sound member of the B.M.A., he was never known to miss an annual general meeting of the Assam Branch. For some years he led his district on the polo field, and was recognized as one of the better players in Assam. The untimely death of this skilful and popular practitioner is a great loss to the profession and a grievous blow to his many friends and patients. He is survived by his young widow and two children, to whom we extend our deepest sympathy.

Medical Notes in Parliament

Judgment on Durham

Sir Walter Monckton announced on July 30 the award of the Board of Arbitration appointed to determine the difference between the Durham County Council and the Joint Emergency Committee of the Professions. He said the House would recall that differences between the county council and some of its professional employees had persisted for a long time. The present difference had arisen over the county council's regulation that applications for extended sick pay must be made by or through a trade union or other appropriate organization. The assistance of his Department had been sought in June after some 4,000 teachers employed by the county council had handed in notice of resignation from August 31. At the request of the parties he had appointed a Board of Arbitration to determine the difference. The parties undertook in advance to accept and implement any award made by the Board. Both parties accepted that, so far as certain professions were concerned, membership of a trade union or professional organization should not be imposed as a condition of employment. Accordingly the agreed terms of reference included the question of whether the present regulations of the council governing the making of applications for extended sick pay were in conflict with the principle of voluntary membership of a trade union or professional organization and should be withdrawn.

The Board's award, Sir Walter Monckton said, was that in so far as the regulations required such applications to be made through a trade union or other appropriate organization they were in conflict with the principle and should be withdrawn.

Mr. Alfred Robens asked whether the House could accept the situation as being finally closed. Sir Walter said he hoped and thought so.

Drinks in Hospital

Mr. James Hudson on July 31 asked the Minister of Health to insist that provision of alcoholic beverages to patients in hospitals should not be allowed except under doctor's prescriptions.

Mr. IAIN MACLEOD said it was the practice to advise hospital authorities that alcoholic beverages should be supplied to hospital patients as part of their diet only on doctors' orders. Their cost was not recorded separately, but he had no reason to think that they were being supplied extravagantly.

Powers of Hospital Consultative Committee

On July 31 Mr. C. F. H. GOUGH inquired how far hospital joint staffs consultative committees were competent to discuss and decide upon matters of hours and wages.

Mr. IAIN MACLEOD replied that rates of pay and conditions of service generally in the hospital service were determined nationally by the Whitley Councils and were outside the competence of hospital staffs consultative committees. They

might, however, consider purely local matters, such as the distribution of the working hours of particular grades of staff in their own hospitals.

Medical Examination of Z Men

Colonel J. H. HARRISON asked whether the Minister of Labour had arranged for ex-Japanese prisoners-of-war, called up for further service, to have special consideration at their medical examination.

Mr. Harold Watkinson replied on August 1 that Sir Walter Monckton had sent a note to chairmen of medical boards early in March last, asking examiners to pay particular attention to the medical history of these reservists, and to take full account of any condition or disability resulting from imprisonment still present and of any possibility of the reservist's physical or mental condition deteriorating as a result of privations suffered as a prisoner-of-war.

Bone-conduction Hearing-aids.—The Electro-Acoustics Committee of the Medical Research Council has assessed the results of clinical trials of an experimental bone-conduction aid produced for the National Health Service, and has recommended this aid for issue to patients for whom a bone-conduction aid is more suitable than an air-conduction aid. Mr. Macleod will arrange large-scale production as soon as possible.

Child Psychotherapists.—There is no agreement at present as to what should be the qualifications and functions of non-medical personnel engaged in psychotherapy, or under what conditions they should be employed in the Health Service, if at all.

Hospital Waiting-lists.—Patients in England and Wales awaiting admission to hospitals taken over under the National Health Service Act numbered 503,584 on December 31, 1951.

On August 1 both Houses adjourned until Tuesday, October 14.

Medico-Legal

HYPNOTIST'S APPEAL

[From Our Medico-Legal Correspondent]

The Court of Appeal on July 30¹ allowed part of the appeal of Ralph Slater, the hypnotist, from the judgment of Mr. Justice Croom-Johnson at Sussex Assizes on March 30, 1952.² The Court set aside the order for £1,000 general damage and £107 special damages awarded to the plaintiff, Miss Diana Grace Rains-Bath, on the grounds of Mr. Slater's negligence, and ordered a new trial of that issue. It did not disturb Mr. Justice Croom-Johnson's judgment for £25 damages on the issue of assault.

In his judgment Lord Justice Singleton said that the plaintiff's case had been that she had been told under hypnosis that she would be very frightened and would cry for her mother. The medical evidence was that it was foolish and wrong for a hypnotist to put into the mind of someone under hypnosis anything in the nature of terrifying thoughts, and that if suggestions of such a nature were put into the mind of a subject great care must be taken to remove any trace of fear. The defendant's case was that he had been in no way negligent, that as a stage hypnotist he had hypnotized possibly 25,000 people without any complaint, and that he had not told the plaintiff that she would be frightened.

It was obvious that there were serious considerations for the jury. The medical witnesses must have found some difficulty in connecting the condition of the plaintiff 18 months after the hypnosis with the hypnosis itself, though there was some evidence on that. It was important that it should be put before the jury with clarity. There was nothing in the summing-up which directed the jury to the question whether the defendant had implanted in the mind of the plaintiff something of a terrifying nature, and, if he

¹The Times, July 31. ²British Medical Journal, April 12, p. 823.